IN THE ABSTRACT:

Please amend the Abstract as follows:

— A router ~~includes a classifier that~~ classifies packets assigned to 2^{n+m} $\underline{X*Y}$ classes of service into 2^n $\underline{X}$ classes of service ~~that are~~ supported by the router, each of the X classes of service having Y loss-priority levels. ~~The classifier then sets the loss priorities of the respective packets to one of m levels. The router uses a modified weighted random early detection scheme that is based on probabilities of discard associated with the 2^{n+m} classes of service to determine whether to retain or discard particular packets.~~ The router maintains a free queue that links available entries of a buffer in which packets are stored. ~~uses a single buffer to store packets directed to all of the various output ports. The available storage locations in the buffer are linked to a free queue and a~~ A weighted average depth of the free queue~~,~~ is used to ~~determined~~ determine whether ~~or not~~ to retain a given packet. ~~The router compares the weighted average depth of the free queue to maximum and minimum thresholds associated with the particular 2^{n+m} class of service to which the packet is assigned.~~ If the weighted average is above ~~the~~ a maximum threshold, the packet is retained. If the weighted average is below ~~the~~ a minimum threshold, the packet is discarded. If the weighted average is between the two thresholds, a probability of discard that is based on the 2^{n+m} $\underline{X*Y}$ classes of service is calculated and compared to a random value to determine whether ~~or not~~ the packet should be retained. ~~If the probability of discard exceeds the random value, the packet is discarded. The other packets exit various output ports of the router based on weighting factors associated with the 2^n classes of service.~~ —

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